A. **MAXIMUM RATING:**

Electrostatic Sensitive Device (ESD)

1. Input Power Level: 10dBm
2. DC voltage: 3V
3. Operating Temperature: -30°C to 60°C
4. Storage Temperature: -40°C to +85°C

B. **CHARACTERISTICS:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center frequency Fc</td>
<td>MHz</td>
<td>-</td>
<td>948</td>
<td>-</td>
</tr>
<tr>
<td>Amplitude ripple (944 ~ 952MHz)</td>
<td>dB</td>
<td>-</td>
<td>0.3</td>
<td>1.5</td>
</tr>
<tr>
<td>Insertion loss, IL (944 ~ 952MHz)</td>
<td>dB</td>
<td>-</td>
<td>2.3</td>
<td>3.0</td>
</tr>
<tr>
<td>Group delay, GD (944 ~ 952MHz)</td>
<td>ns</td>
<td>40</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>3dB Bandwidth</td>
<td>MHz</td>
<td>8</td>
<td>17</td>
<td>-</td>
</tr>
<tr>
<td>Attenuation (reference from 0dB)</td>
<td>dB</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.3 ~ 875MHz</td>
<td></td>
<td>40</td>
<td>59</td>
<td>-</td>
</tr>
<tr>
<td>875 ~ 933MHz</td>
<td></td>
<td>10</td>
<td>26</td>
<td>-</td>
</tr>
<tr>
<td>963 ~ 1030MHz</td>
<td></td>
<td>10</td>
<td>31</td>
<td>-</td>
</tr>
<tr>
<td>1030 ~ 1350MHz</td>
<td></td>
<td>40</td>
<td>68</td>
<td>-</td>
</tr>
<tr>
<td>1350 ~ 1500MHz</td>
<td></td>
<td>40</td>
<td>46</td>
<td>-</td>
</tr>
<tr>
<td>Source impedance Z_s</td>
<td>Ω</td>
<td>-</td>
<td>50</td>
<td>-</td>
</tr>
<tr>
<td>Load impedance Z_L</td>
<td>Ω</td>
<td>-</td>
<td>50</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: No matching network required for operation at 50Ω
C. FREQUENCY CHARACTERISTICS:

1. Wideband

[Graph showing frequency characteristics with data points and lines]

2. Passband

[Graph showing frequency characteristics with data points and lines]
3. VSWR

**S11**

![S11 Diagram]

**S22**

![S22 Diagram]
D. MEASUREMENT CIRCUIT:

![Measurement Circuit Diagram]

E. OUTLINE DRAWING:

![Outline Drawing Diagram]

B: Input  
E: Output  
A, C, D, F: Ground  
Unit: mm
F. PACKING:

1. Reel Dimension

![Reel Dimension Diagram]

2. Tape Dimension

![Tape Dimension Diagram]
G. RECOMMENDED REFLOW PROFILE:

![Graph showing recommended reflow profile](image)

- Time (Sec) on the x-axis
- Temp (Deg C) on the y-axis

- Temperature ranges from 20 to 280 degrees Celsius
- Time ranges from 0 to 360 seconds